FILE 'MEDLINE, BIOSIS, SCISEARCH, CAPLUS, EMBASE' ENTERED AT 07:31:06 ON 24 MAR 2003

L1 114 S (AUDONNET?/AU OR FISCHER-L?/AU OR BARZU-LE-ROUX?/AU)AND(BOVIN
L2 76 DUP REM L1 (38 DUPLICATES REMOVED)
L3 951 S BOVINE AND VACCINE AND RESPIRATORY AND VIRUS
L4 1948 S BOVINE RESPIRATORY AND VIRUS
L5 612 S L4 AND VACCIN?
L6 295 S L5 AND BRSV
L7 21 S L6 AND PLASMID
L8 3821 S VACCINE AND LIPOSOME
L9 98 S (DMRIE OR DOPE) AND (VACCINE OR ADJUVANT)
L10 63 DUP REM L9 (35 DUPLICATES REMOVED)
L11 25 S DMRIE AND DOPE AND (VACCINE OR ADJUVANT)
L12 16 DUP REM L11 (9 DUPLICATES REMOVED)

=>

L Number	Hits	Search Text	DB	Time stamp
2	69052	bovine	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:01
3	10557	bovine and respirator$	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:01
4	8337	(bovine and respirator$) and vir$	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:02
5	7355	(bovine and respirator$) and (virus viral)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:02
6	3021	((bovine and respirator$) and (virus viral)) and vaccine	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:02
7	750	bovine WITH respiratory	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:03
8	232	(bovine WITH respiratory) SAME vaccine	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:03
9	48	((bovine WITH respiratory) SAME vaccine) AND BRSV	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:03
10	26	(((bovine WITH respiratory) SAME vaccine) AND BRSV) and plasmid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:08
11	21	(audonnet-j$.in. Fischer-L$.in. Barzu-le-roux$.in) and bovine	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/24 06:10

L6 ANSWER 4 OF 4 MEDLINE DUPLICATE 1
AN 1999041640 MEDLINE
DN 99041640 PubMed ID: 9826267
TI Direct gene transfer to the respiratory tract of mice with pure plasmid and lipid-formulated DNA.
AU McCluskie M J; Chu Y; Xia J L; Jessee J; Gebyehu G; Davis H L
CS Loeb Research Institute, Ottawa, Canada.
SO ANTISENSE AND NUCLEIC ACID DRUG DEVELOPMENT, (1998 Oct) 8 (5) 401-14.
Journal code: 9606142. ISSN: 1087-2906.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199906
ED Entered STN: 19990618
Last Updated on STN: 19990618
Entered Medline: 19990604
AB Direct gene transfer into the respiratory system could be carried out for either therapeutic or immunization purposes. Here we demonstrate that cells in the lung can take up and express plasmid DNA encoding a luciferase reporter gene whether it is administered in naked form or formulated with cationic liposomes. Depending on the lipid used, the transfection efficiency with liposome-formulated DNA may be higher, the same as, or less than that with pure plasmid DNA. Tetramethyltetraalkylspermine analogs with alkyl groups of 16 or 18 carbons and **DMRIE**/cholesterol formulations proved particularly effective. Similar results for reporter gene expression in the lung were obtained whether the DNA (naked or lipid formulated) was administered by indirect, noninvasive intranasal delivery (inhaled or instilled) or by invasive, direct intratracheal delivery (injected or via a cannula). Reporter gene expression peaks around 4 days, then falls off dramatically by 9 days. The dose-response is linear, at least up to 100 microg plasmid DNA, suggesting better transfection efficiencies might be realized if there was not a volume limitation. For a given dose of DNA, the best results are obtained when the DNA is mixed with the minimum amount of lipid that can complex it completely. These results are discussed in the context of direct gene transfer for either gene therapy or delivery of a mucosal **DNA vaccine**.